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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,624

01/20/2004

Robert Elliott Robotham

1400.1374080

8250

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7590

01/15/2009

ROSS D. SNYDER & ASSOCIATES, INC.

PO BOX 164075

AUSTIN, TX 78716-4075

EXAMINER

SAM, PHIRIN

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

01/15/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/760,624	<b>Applicant(s)</b> ROBOTHAM, ROBERT ELLIOTT	
	<b>Examiner</b> PHIRIN SAM	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 9-15 is/are allowed.
- 6) ☒ Claim(s) 8 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,621,825 to Walsh et al (hereinafter “Walsh”) in view of US 2005/0047440 of Plun et al (hereinafter “Plun”).

**Regarding claim 16**, Walsh discloses an apparatus for multicasting data (see Figs. 1 and 2, col. 3, lines 39-40) comprising:

- (a) a queuing element for receiving the data and for transmitting the data to a plurality of multicast destinations via a plurality of destination queues (see Figs. 2, 4-12, and col. 4, lines 53-56);
- (b) a memory subsystem for storing the data, queue context information pertaining to a root connection, data context information pertaining to the data, a data element pointer, and a leaf to be processed pointer (see Figs. 2 and 4-10, col. 4, lines 57-62, col. 5, lines 49-67, and col. 6, lines 1-23);

Walsh does not disclose a scheduler for scheduling a dequeuing event for the data. However, Plun discloses the scheduler for scheduling the dequeuing event for the data (see Figs. 4 and 6, paragraph [0045]). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the scheduler for scheduling the dequeuing event for the

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data teaching by Plun with Walsh. The motivation for doing so would have been to provide to reduce the number of redundant copies of information associated with traffic in a network read on paragraph [0011]. Therefore, it would have been obvious to combine Plun and Walsh to obtain the invention as specified in the claim 16.

**Regarding claim 17**, Walsh discloses the memory subsystem comprises:

a data memory for storing the data (see Figs. 2, 4-12, col. 4, lines 53-56); a queue context block for storing queue context information for each of the destination queues (see Figs. 2, 4-12, col. 4, lines 53-56); a data context block for storing data context information for each of the data elements of the data (see Figs. 2 and 4-12); and a to-do list for storing the data element pointer and the leaf to be processed pointer (see Fig. 3, col. 5, lines 14-34).

**Regarding claim 18**, Walsh discloses the data context information comprises:

a copy count for counting events of transmitting the data (see Fig. 4, col. 6, lines 24-36); and a next data element pointer for indicating a next data element of the data to be processed (see Fig. 3, col. 5, lines 18-34).

**Regarding claim 19**, Walsh discloses the queue context information comprises a head pointer; a tail pointer; and a root pointer (see Fig. 3, col. 5, lines 30-48).

**Regarding claim 20**, Walsh discloses the to-do list further comprises: a leaf count for counting destination queues to which the data shall be transmitted (see Fig. 4, col. 6, lines 24-51).

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,621,825 to Walsh et al (hereinafter “Walsh”) in view of US Patent 7,006,495 of Hooper (hereinafter “Hooper”).

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**Regarding claim 8**, Walsh discloses a method for multicasting data comprising:

- (a) adding the data to a queue as enqueued data (see Fig. 2, col. 4, lines 53-57);
- (b) transmitting the enqueued data to each of a plurality of multicast destinations (see Fig. 2, col. 4, lines 39-52);

Walsh does not disclose determining that all of the enqueued data for a particular destination of the multicast destinations have been transmitted. However, Hooper discloses disclose determining that all of the enqueued data for a particular destination of the multicast destinations have been transmitted (see Figs. 3 and 4, col. 4, lines 33-64, and claim 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine determining that all of the enqueued data for a particular destination of the multicast destinations have been transmitted teaching by Hooper with Walsh. The motivation for doing so would have been to provide to improve the enqueue the data packets for transmission. Therefore, it would have been obvious to combine Hooper and Walsh to obtain the invention as specified in the claim 8.

***Allowable Subject Matter***

- 4. Claims 1-7 and 9-15 are allowed.

***Response to Arguments***

- 5. Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHIRIN SAM whose telephone number is (571)272-3082. The examiner can normally be reached on Increased Flexitime Policy (IFP) Program.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: January 13, 2009

By: /Phirin Sam/  
Phirin Sam  
Primary Examiner  
Art Unit 2419